

10/781,894

1/9/2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAJDA1614

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS	3	AUG 06	FSTA enhanced with new thesaurus edition
NEWS	4	AUG 13	CA/CAPplus enhanced with additional kind codes for granted patents
NEWS	5	AUG 20	CA/CAPplus enhanced with CAS indexing in pre-1907 records
NEWS	6	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS	7	AUG 27	USPATOLD now available on STN
NEWS	8	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS	9	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS	10	SEP 13	FORIS renamed to SOFIS
NEWS	11	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS	12	SEP 17	CA/CAPplus enhanced with printed CA page images from 1967-1998
NEWS	13	SEP 17	CAPplus coverage extended to include traditional medicine patents
NEWS	14	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	15	OCT 02	CA/CAPplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	16	OCT 19	BEILSTEIN updated with new compounds
NEWS	17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	18	NOV 19	WPIX enhanced with XML display format
NEWS	19	NOV 30	ICSD reloaded with enhancements
NEWS	20	DEC 04	LINPADOCDB now available on STN
NEWS	21	DEC 14	BEILSTEIN pricing structure to change
NEWS	22	DEC 17	USPATOLD added to additional database clusters
NEWS	23	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS	24	DEC 17	DGENE now includes more than 10 million sequences
NEWS	25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	26	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS	27	DEC 17	CA/CAPplus enhanced with new custom IPC display formats
NEWS	28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	29	JAN 02	STN pricing information for 2008 now available
NEWS EXPRESS	19	SEPTEMBER 2007:	CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS LOGIN			Welcome Banner and News Items
NEWS IPC8			For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

***** STN Columbus *****

FILE 'HOME' ENTERED AT 14:40:35 ON 09 JAN 2008

=> file registry

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 14:40:51 ON 09 JAN 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 JAN 2008 HIGHEST RN 960198-43-0

DICTIONARY FILE UPDATES: 8 JAN 2008 HIGHEST RN 960198-43-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

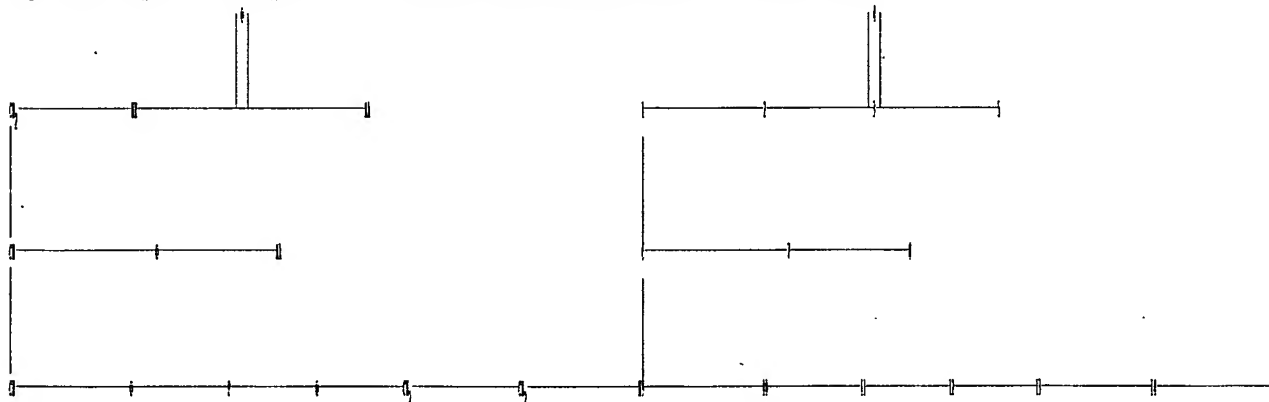
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10781894.str



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

chain bonds :

1-2 1-6 2-3 3-4 3-5 6-7 6-9 7-8 9-10 10-11 11-12 12-13 13-14 14-15

exact/norm bonds :

2-3 3-4 3-5 6-7 7-8 9-10 10-11 11-12
exact bonds :
1-2 1-6 6-9 12-13 13-14 14-15

Match level :

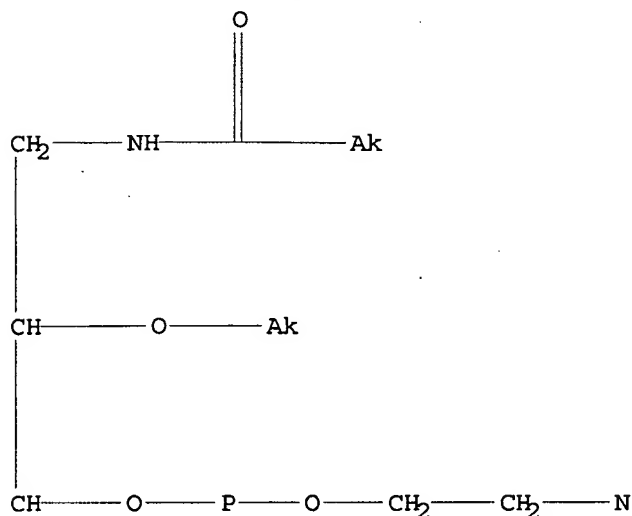
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

FULL SEARCH INITIATED 14:41:12 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 4703 TO ITERATE

100.0% PROCESSED 4703 ITERATIONS

70 ANSWERS

SEARCH TIME: 00.00.01

L2 70 SEA SSS FUL L1

=> file medline caplus wpids uspatfull

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'MEDLINE' ENTERED AT 14:41:28 ON 09 JAN 2008

FILE 'CAPLUS' ENTERED AT 14:41:28 ON 09 JAN 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 14:41:28 ON 09 JAN 2008

COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'USPATFULL' ENTERED AT 14:41:28 ON 09 JAN 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l2
SAMPLE SEARCH INITIATED 14:41:35 FILE 'WPIDS'
SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 22 TO 238
PROJECTED ANSWERS: 1 TO 40

L3 48 L2

=> s l3 and virus
L4 22 L3 AND VIRUS

=> s l4 and RSV
L5 2 L4 AND RSV

=> d l5 1-2 ibib, abs, hitstr

L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:902611 CAPLUS
DOCUMENT NUMBER: 143:241938
TITLE: Methods and compositions for the treatment of
respiratory syncytial virus
INVENTOR(S): Kucera, Louis S.; Morris-Natschke, Susan L.; Ishaq,
Khalid S.; Fleming, Ronald A.; Hess, Jan V.; Huang,
Yunsheng; Read, Russ H.; Furman, Phillip A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 29 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005187191	A1	20050825	US 2004-781894	20040220
WO 2005099719	A2	20051027	WO 2005-US3972	20050209
WO 2005099719	A3	20070322		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-781894 A 20040220

OTHER SOURCE(S): MARPAT 143:241938

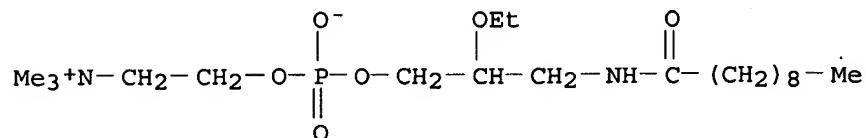
AB The invention includes compds. useful for inhibiting RSV
replication and treating a host infected with RSV. The
invention also includes methods of treating a host infected with
RSV by administering to the host an anti-RSV effective
amount of a compound of the invention.

IT 443882-90-4, KPC 11 443882-91-5, KPC 15

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (comps. for treatment of respiratory syncytial virus)

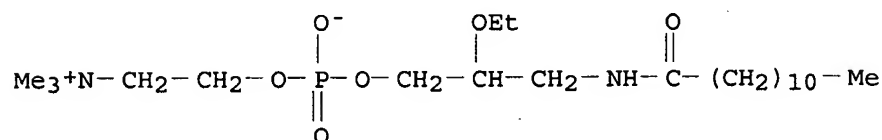
RN 443882-90-4 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-91-5 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



IT 207298-91-7 207298-93-9 252371-27-0

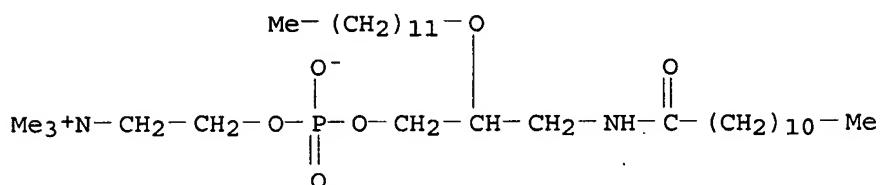
443882-96-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(comps. for treatment of respiratory syncytial virus)

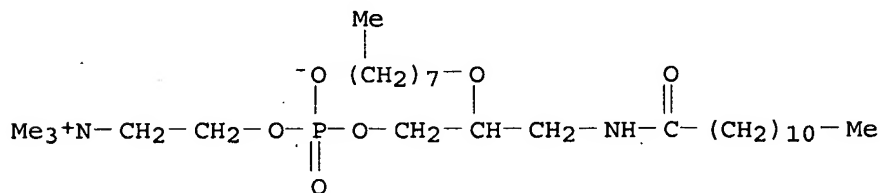
RN 207298-91-7 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-(dodecyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



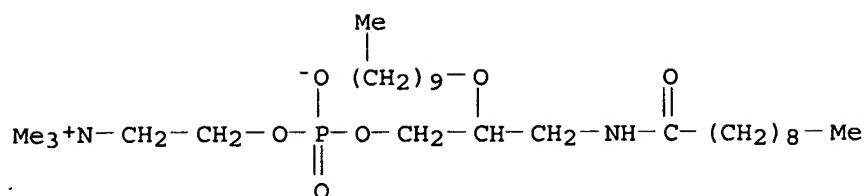
RN 207298-93-9 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



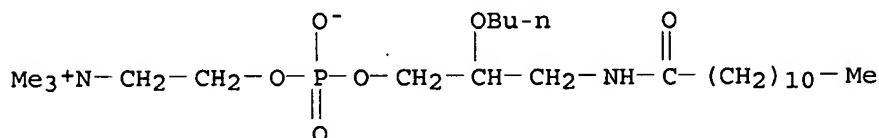
RN 252371-27-0 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-96-0 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-butoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L5 ANSWER 2 OF 2 USPATFULL on STN

ACCESSION NUMBER: 2005:215515 USPATFULL

TITLE: Methods and compositions for the treatment of respiratory syncytial virus

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, UNITED STATES
Morris-Natschke, Susan L., Apex, NC, UNITED STATES
Ishaq, Khalid S., Chapel Hill, NC, UNITED STATES
Fleming, Ronald A., Cary, NC, UNITED STATES
Hess, Jan V., Hurdle Mills, NC, UNITED STATES
Huang, Yunsheng, Apex, NC, UNITED STATES
Read, Russ H., Rural Hall, NC, UNITED STATES
Furman, Phillip A., Durham, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005187191	A1	20050825
APPLICATION INFO.:	US 2004-781894	A1	20040220 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004, US		
NUMBER OF CLAIMS:	39		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Page(s)		
LINE COUNT:	2105		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes compounds useful for inhibiting RSV replication and treating a host infected with RSV. The invention also includes methods of treating a host infected with RSV by administering to the host an anti-RSV effective amount of a compound of the invention.

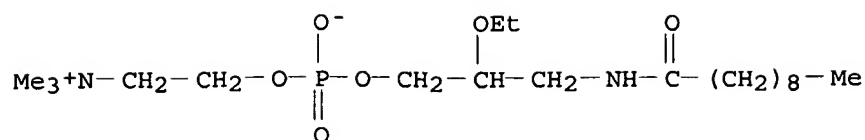
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 443882-90-4, KPC 11 443882-91-5, KPC 15

(compns. for treatment of respiratory syncytial virus)

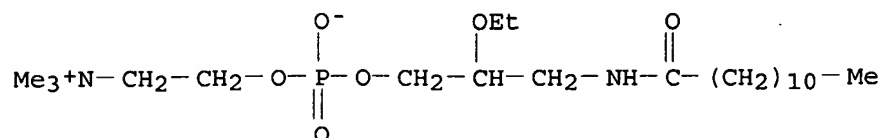
RN 443882-90-4 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-91-5 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



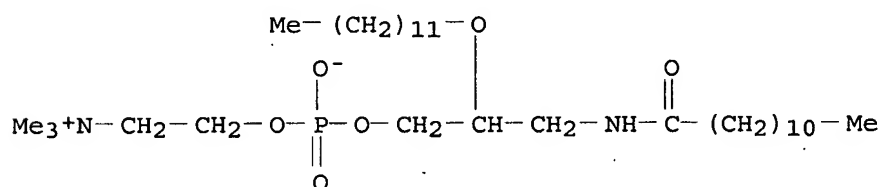
IT 207298-91-7 207298-93-9 252371-27-0

443882-96-0

(comps. for treatment of respiratory syncytial virus)

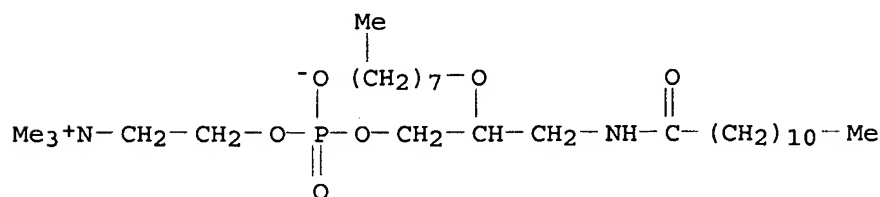
RN 207298-91-7 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-(dodecyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



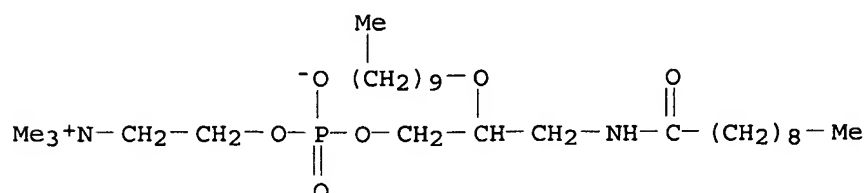
RN 207298-93-9 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)

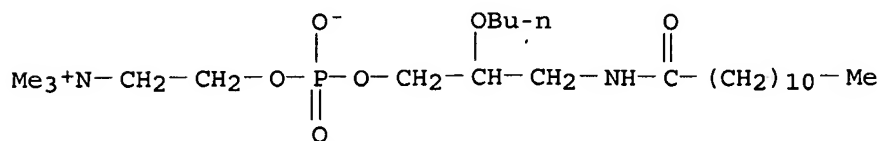


RN 252371-27-0 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-96-0 USPATFULL
 CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-butoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 14:40:35 ON 09 JAN 2008)

FILE 'REGISTRY' ENTERED AT 14:40:51 ON 09 JAN 2008

L1 STRUCTURE UPLOADED
 L2 70 S L1 FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:41:28 ON 09 JAN 2008

L3 48 S L2
 L4 22 S L3 AND VIRUS
 L5 2 S L4 AND RSV

=> d l4 1-22 ibib, abs, hitstr

L4 ANSWER 1 OF 22 MEDLINE on STN
 ACCESSION NUMBER: 91202492 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 2016713
 TITLE: In vitro evaluation of phosphocholine and quaternary ammonium containing lipids as novel anti-HIV agents.
 AUTHOR: Meyer K L; Marasco C J Jr; Morris-Natschke S L; Ishaq K S; Piantadosi C
 CORPORATE SOURCE: University of North Carolina, School of Pharmacy, Division of Medicinal Chemistry and Natural Products, Chapel Hill 27599.
 CONTRACT NUMBER: CA 12197 (NCI)
 CA 42216 (NCI)
 RR 05404 (NCRR)
 SOURCE: Journal of medicinal chemistry, (1991 Apr) Vol. 34, No. 4, pp. 1377-83.
 Journal code: 9716531. ISSN: 0022-2623.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: (COMPARATIVE STUDY)
 Journal; Article; (JOURNAL ARTICLE)
 (RESEARCH SUPPORT, NON-U.S. GOV'T)
 (RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals; AIDS
 ENTRY MONTH: 199105
 ENTRY DATE: Entered STN: 7 Jun 1991
 Last Updated on STN: 3 Feb 1997
 Entered Medline: 21 May 1991
 AB A series of synthetic lipids containing a two- or three-carbon backbone substituted with a thio, oxy, or amidoalkyl functionality and either a phosphocholine or quaternary ammonium moiety was evaluated as potential anti-HIV-1 agents. Several analogues were identified as possessing activity with the most promising compound being rac-3-octadecanamido-2-ethoxypropylphosphocholine (8). Compound 8 exhibited an IC50 for the inhibition of plaque formation of 0.16 microM which was 84-fold lower than the IC50 value determined for CEM-SS cell growth inhibition. Initial

mechanistic studies have indicated that these compounds, unlike AZT, are not reverse transcriptase (RT) inhibitors, but instead appear to inhibit a late step in HIV replication involving virus assembly and infectious virus production. Since these lipids are acting via a different mechanism, they represent an alternative approach to the chemotherapeutic treatment of AIDS as well as candidates for combination therapy with AZT.

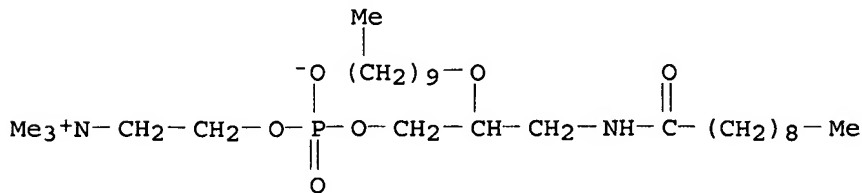
L4 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:904330 CAPLUS
DOCUMENT NUMBER: 143:222464
TITLE: Phospholipids for the treatment of infection by
togaviruses, herpes viruses and coronaviruses
INVENTOR(S): Fleming, Ronald A.; Hes, Jan V.; Huang, Yunsheng;
Read, Russ H.; Morris-Natschke, Susan L.; Ishaq,
Khalid S.; Kucera, Louis S.; Furman, Phillip A.
PATENT ASSIGNEE(S): Kucera Pharmaceutical Company, USA
SOURCE: U.S. Pat. Appl. Publ., 36 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

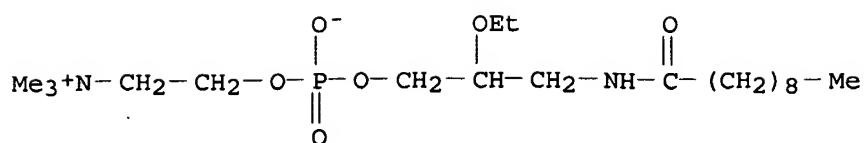
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005187192	A1	20050825	US 2004-783927	20040220
PRIORITY APPLN. INFO.:			US 2004-783927	20040220
OTHER SOURCE(S): MARPAT 143:222464				

AB Provided are compds., methods and pharmaceutical compns. for treating a host, especially a human, infected with a togavirus, herpes virus and/or coronavirus, and in particular SARS-CoV, cytomegalovirus or varicella-zoster virus. The method in one embodiment comprises administering to that host an effective amount of an anti-togavirus, anti-herpes virus and/or anti-coronavirus phospholipid or a pharmaceutically acceptable salt or prodrug thereof. The phospholipid compound is, e.g., a 3-alkylamido-2-alkoxypropylphosphocholine compound or salt thereof. The compound may be administered alone or in combination and/or alternation with one or more other antiviral agents. The EC50 of an alkylamido-2-alkoxypropylphosphocholine against varicella zoster virus was 0.48 µg/mL.

IT 252371-27-0 443882-90-4 443882-91-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(phospholipids for treatment of infection by togaviruses, herpes viruses and coronaviruses)
RN 252371-27-0 CAPLUS
CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)

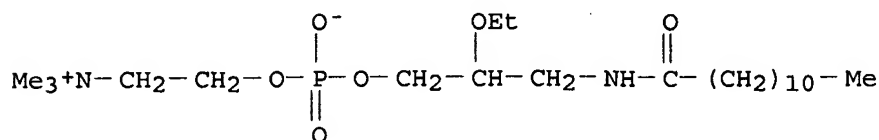


RN 443882-90-4 CAPLUS
CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-91-5 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:902611 CAPLUS

DOCUMENT NUMBER: 143:241938

TITLE: Methods and compositions for the treatment of respiratory syncytial virus

INVENTOR(S): Kucera, Louis S.; Morris-Natschke, Susan L.; Ishaq, Khalid S.; Fleming, Ronald A.; Hess, Jan V.; Huang, Yunsheng; Read, Russ H.; Furman, Phillip A.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 29 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005187191	A1	20050825	US 2004-781894	20040220
WO 2005099719	A2	20051027	WO 2005-US3972	20050209
WO 2005099719	A3	20070322		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2004-781894 A 20040220

OTHER SOURCE(S): MARPAT 143:241938

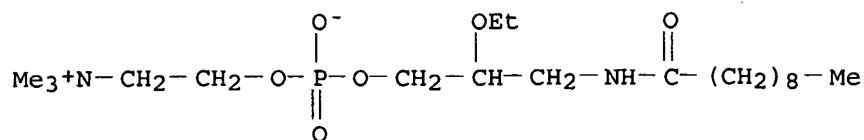
AB The invention includes compds. useful for inhibiting RSV replication and treating a host infected with RSV. The invention also includes methods of treating a host infected with RSV by administering to the host an anti-RSV effective amount of a compound of the invention.

IT 443882-90-4, KPC 11 443882-91-5, KPC 15

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. for treatment of respiratory syncytial virus)

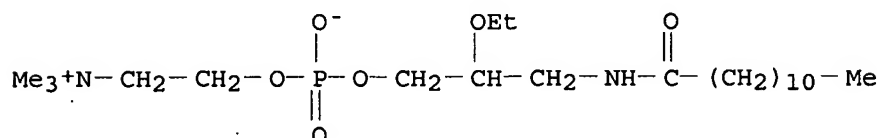
RN 443882-90-4 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-91-5 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



IT 207298-91-7 207298-93-9 252371-27-0

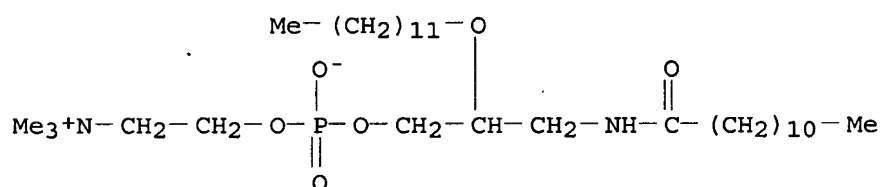
443882-96-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(comps. for treatment of respiratory syncytial virus)

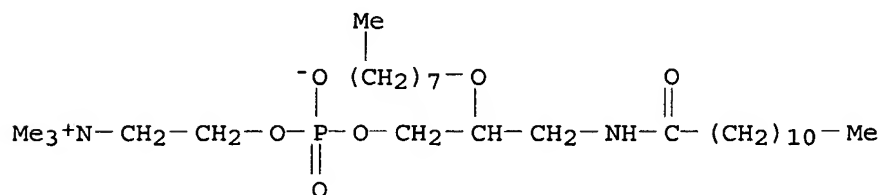
RN 207298-91-7 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-(dodecyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



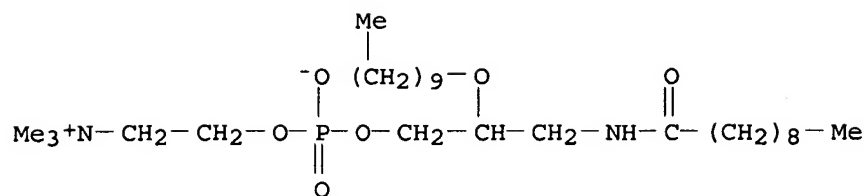
RN 207298-93-9 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



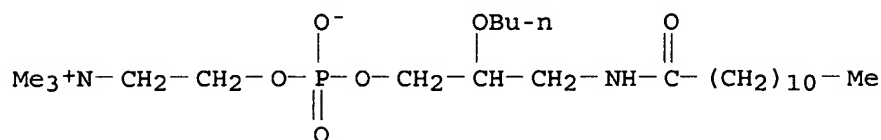
RN 252371-27-0 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-96-0 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-butoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:435743 CAPLUS

DOCUMENT NUMBER: 129:90448

TITLE: Method of treating hepatitis virus infections

INVENTOR(S): Kucera, Louis S.; Morris-Natschke, Susan L.

PATENT ASSIGNEE(S): Wake Forest University, USA; University of North Carolina

SOURCE: U.S., 17 pp., Cont.-in-part of U. S. Ser. No. 74,943, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5770584	A	19980623	US 1995-465947	19950606
US 6030960	A	20000229	US 1998-102308	19980622
PRIORITY APPLN. INFO.:			US 1993-74943	B2 19930610
			US 1995-465947	A3 19950606

OTHER SOURCE(S): MARPAT 129:90448

AB A method of treating hepatitis virus infection is disclosed. The method involves administering to a human subject in need of such treatment an effective hepatitis virus-combating amount of an alkyl lipid or alkyl lipid derivative

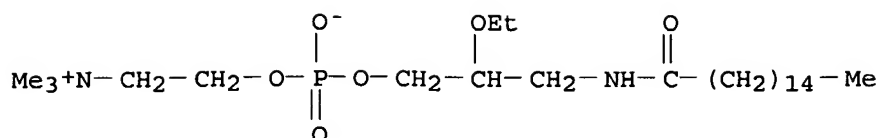
IT 112989-01-2P 112989-02-3P 209532-02-5P 209532-03-6P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(alkyl lipids for treating hepatitis virus infections)

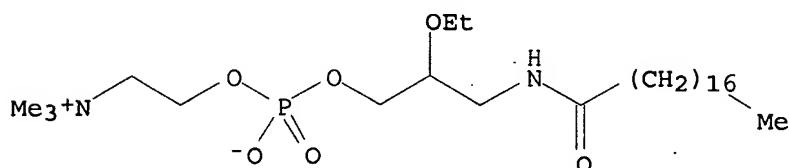
RN 112989-01-2 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 112989-02-3 CAPLUS

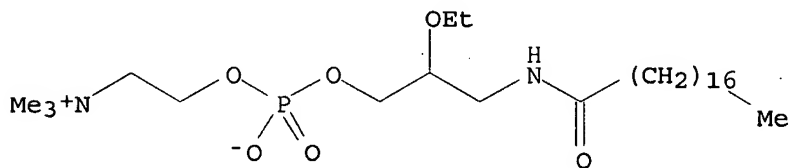
CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 209532-02-5 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide, (+)- (9CI) (CA INDEX NAME)

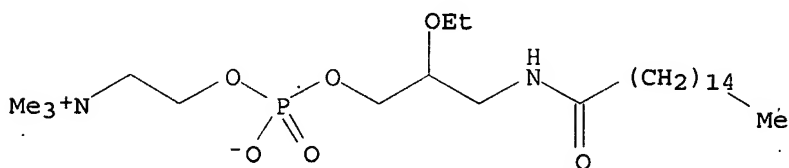
Rotation (+).



RN 209532-03-6 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



REFERENCE COUNT: 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:205430 CAPLUS

DOCUMENT NUMBER: 128:316940

TITLE: In vitro evaluation and characterization of newly designed alkylamidophospholipid analogs as anti-human immunodeficiency virus type 1 agents

AUTHOR(S): Kucera, L. S.; Iyer, N.; Morris-Natschke, S. L.; Chen, S. Y.; Gumus, F.; Ishaq, K.; Herrmann, D. B. J.

CORPORATE SOURCE: Wake Forest University School Medicine, Winston-Salem, NC, USA

SOURCE: Antiviral Chemistry & Chemotherapy (1998), 9(2), 157-165

CODEN: ACCHEH; ISSN: 0956-3202

PUBLISHER: International Medical Press
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Our labs. first reported two novel classes of complex synthetic lipids, including alkylamidophosphocholines (PC lipid; CP-51) and alkylamidophosphate ester-linked lipid-AZT conjugates (lipid-AZT conjugates; CP-92), with selective and potent activity against human immunodeficiency virus type 1 (HIV-1). To extend these observations, we synthesized addnl. PC lipids and lipid-AZT conjugates (INK and INK-AZT conjugate) to evaluate their structure-activity relationships by testing for selectivity against infectious wild-type (wt) and drug-resistant HIV-1 replication, virus fusogenic activity and toxicity replication, virus fusogenic activity and toxicity for mouse bone marrow cells. PC lipid compds. with medium chain lengths at positions 1 and 2 gave an improved selective index (SI). INK-3, with 12 and 8 carbons and INK-15, with 10 and 12 carbons were among the most selective when evaluated in CEM-SS cells. INK-14, a lipid-AZT conjugate where AZT replaced the choline in PC lipid INK-3, gave the highest SI of >1250 against both infectious wt HIV-1 replication in CEM-SS cells and a clin. isolate in peripheral blood leukocytes. Notably, the PC lipid compds. INK-3 and INK-15, but not the lipid-AZT conjugate INK-14, were potent inhibitors of matched pairs of AZT-sensitive and AZT-resistant HIV-1 clin. isolates. INK-3 also inhibited replication of HIV-2 and TIBO-resistant HIV-1, and inhibited HIV-1-mediated fusogenic activity by 78, 41 and 9% in a dose-dependent manner. The TC50 for mouse bone marrow cells was >100 µg/mL for CP-51 and 0.142-0.259 µg/mL for AZT. These data suggest that optimum PC lipid compds. are significantly less toxic than AZT and have high potential as novel therapeutic agents for AIDS.

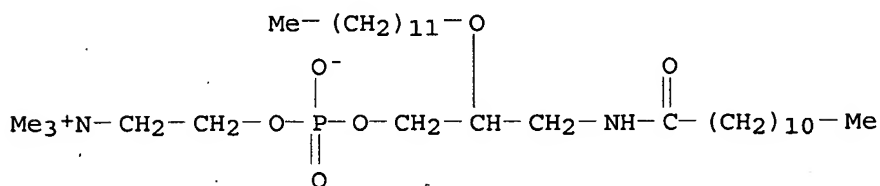
IT 207298-91-7P 207298-92-8P 207298-93-9P
 207298-94-0P 207298-95-1P 207298-97-3P
 207298-99-5P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(anti-HIV-1 activity and preparation of alkylamidophospholipid analogs)

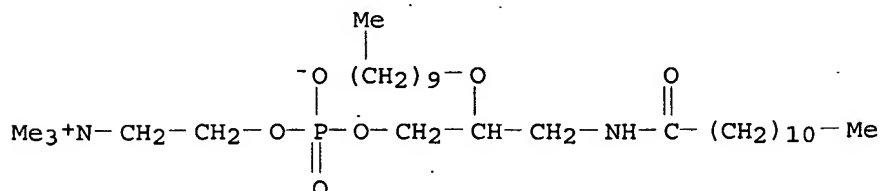
RN 207298-91-7 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-(dodecyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



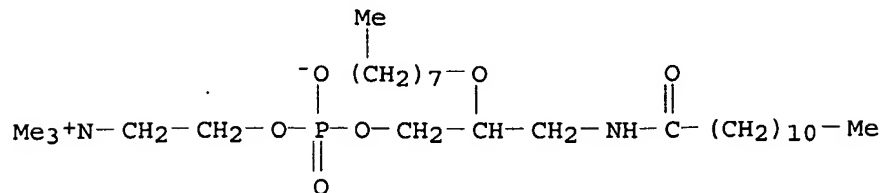
RN 207298-92-8 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



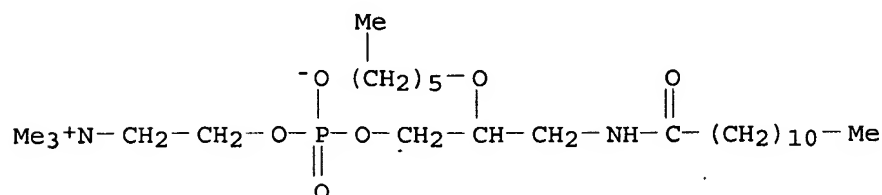
RN 207298-93-9 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



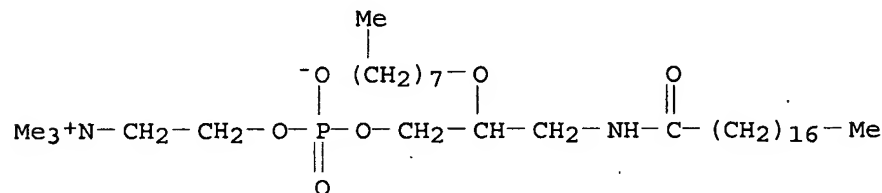
RN 207298-94-0 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-(hexyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



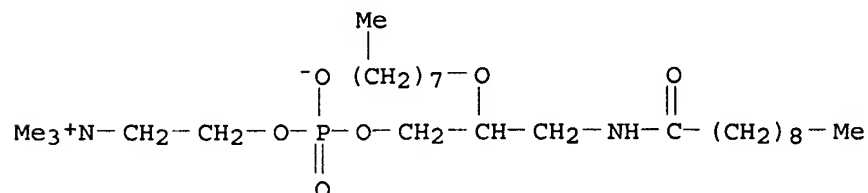
RN 207298-95-1 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



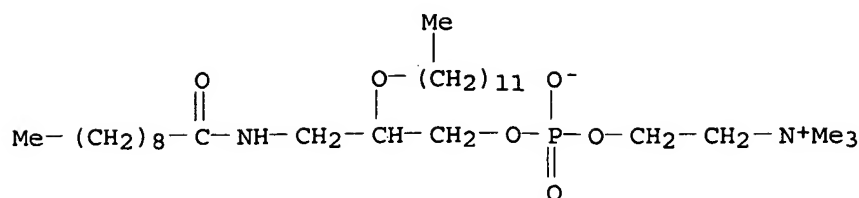
RN 207298-97-3 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphanadecan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)

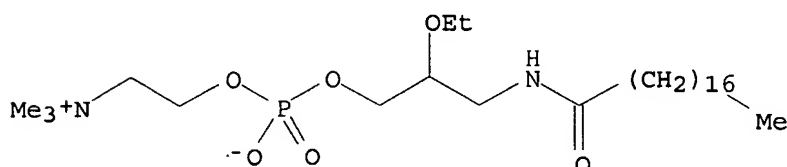


RN 207298-99-5 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphanadecan-1-aminium, 7-(dodecyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



IT 112989-02-3, CP 51
 RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (anti-HIV-1 activity and preparation of alkylamidophospholipid analogs)
 RN 112989-02-3 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1996:388263 CAPLUS
 DOCUMENT NUMBER: 125:49273
 TITLE: Lipid analogs for treating viral infections
 INVENTOR(S): Kucera, Louis S.; Morris-Natschke, Susan L.; Ishaq, Khalid S.
 PATENT ASSIGNEE(S): Wake Forest University, USA; Univ. of North Carolina at Chapel Hill
 SOURCE: PCT Int. Appl., 53 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9606620	A2	19960307	WO 1995-US10111	19950807
WO 9606620	A3	19960613		
W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT			
RW:	KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
CA 2197319	A1	19960307	CA 1995-2197319	19950807
AU 9532166	A	19960322	AU 1995-32166	19950807
EP 781138	A2	19970702	EP 1995-928365	19950807
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE			
JP 10506619	T	19980630	JP 1995-508773	19950807
EP 1852121	A2	20071107	EP 2007-16369	19950807
EP 1852121	A3	20071121		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE			

US 5962437	A	19991005	US 1997-793470	19970502
US 7129227	B1	20061031	US 1999-412539	19991004
US 2004259845	A1	20041223	US 2004-889127	20040713
US 7135584	B2	20061114		
US 2005080050	A1	20050414	US 2004-943923	20040920
US 7141557	B2	20061128		
JP 2007056033	A	20070308	JP 2006-278049	20061011
US 2007099870	A1	20070503	US 2006-588313	20061027
US 7294621	B2	20071113		
US 2007105811	A1	20070510	US 2006-588308	20061027
US 7294619	B2	20071113		
US 2007105812	A1	20070510	US 2006-588311	20061027
US 7294620	B2	20071113		

PRIORITY APPLN. INFO.:

US 1994-297416	A	19940829
US 1994-314901	A	19940929
EP 1995-928365	A3	19950807
JP 1996-508773	A3	19950807
WO 1995-US10111	W	19950807
US 1997-793470	A3	19970502
US 1999-412539	B1	19991004
US 2004-889127	A3	20040713
US 2004-943923	A3	20040920

OTHER SOURCE(S): MARPAT 125:49273

AB A method of treating viral infections, in particular with HIV-1, hepatitis B virus, and herpes viruses, is disclosed. The method comprising administering to a subject in need of such treatment an infection-combating amount of a phospholipid or phospholipid derivative. For example, 1-dodecanamido-2-decylpropyl-3-phosphocholine showed IC50 value of 0.14 μ M against HIV-1 syncytial plaque formation.

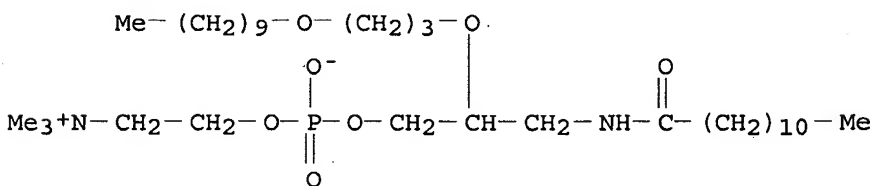
IT 178172-98-0 178172-99-1 178173-00-7
178173-01-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(phospholipids for treating viral infections and tumors)

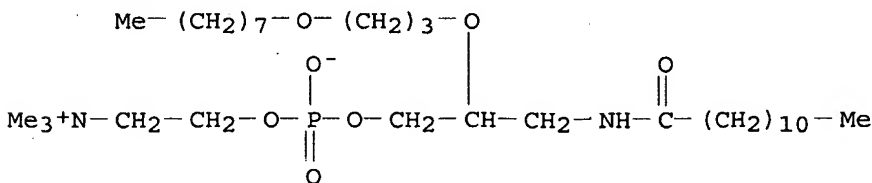
RN 178172-98-0 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(decyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



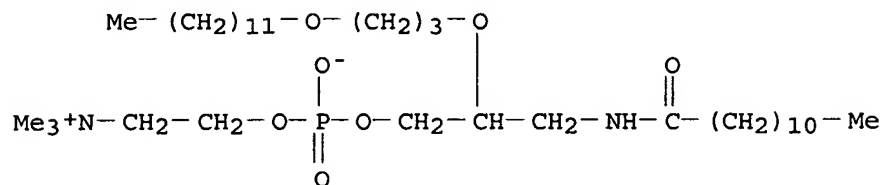
RN 178172-99-1 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[3-(octyloxy)propoxy]-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



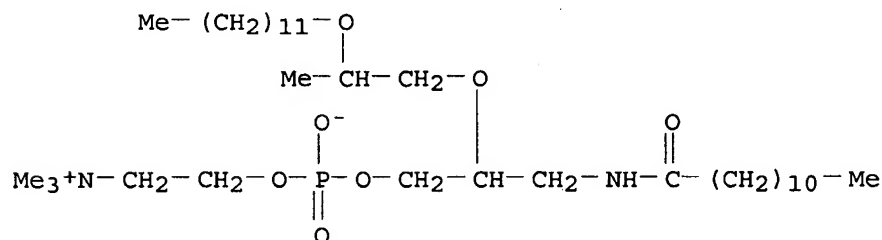
RN 178173-00-7 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 178173-01-8 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[2-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:701769 CAPLUS

DOCUMENT NUMBER: 123:112632

TITLE: Phospholipids for combating hepatitis B virus infection

INVENTOR(S): Kucera, Louis S.; Morris-Natschke, Susan L.

PATENT ASSIGNEE(S): Wake Forest University, USA; University of North Carolina

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

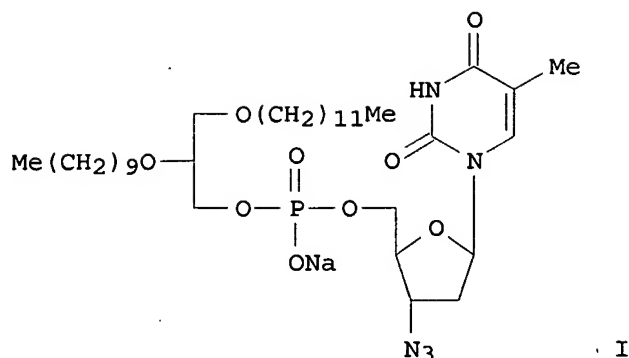
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

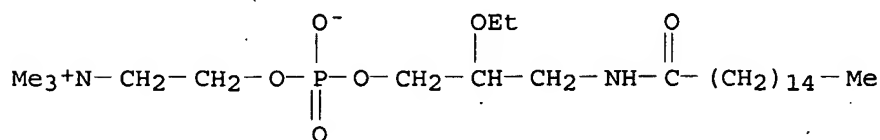
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9428908	A2	19941222	WO 1994-US5855	19940525
WO 9428908	A3	19950323		
W:	AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN			
RW:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
CA 2164717	A1	19941222	CA 1994-2164717	19940525
AU 9470448	A	19950103	AU 1994-70448	19940525
EP 702556	A1	19960327	EP 1994-919231	19940525
EP 702556	B1	20021023		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE			
AT 226437	T	20021115	AT 1994-919231	19940525
PRIORITY APPLN. INFO.:			US 1993-74943	A 19930610
			WO 1994-US5855	W 19940525

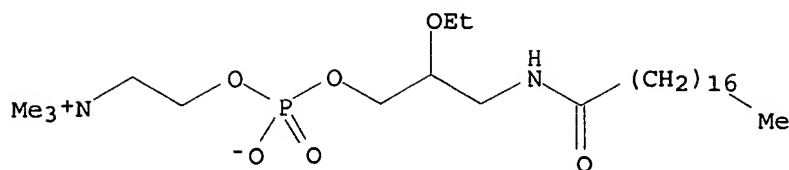
OTHER SOURCE(S): MARPAT 123:112632



- AB A method of treating infection with hepatitis B virus is disclosed. The method comprises administration of alkyl ether phospholipids and derivs. of formula $DCH_2XCH_2YR_1$ [$Y = S, O, NH, NMe, NHCO, NMeCO$; $R_1 =$ (un)branched (un)saturated C_{10-20} alk(en/yn)yl; $X =$ bond, CH_2 (un)substituted by OH, alkyl, alkoxy, or alkylthio; $D = (PO_4)-E, N+R_5R_6FW$ Z^- ; $E =$ (mono/di/trialkyl)ammonioalkyl or a nucleic acid base conjugate; $F =$ alkylene; $R_5, R_6 = H, alkyl$; $W = OH, SH$; $Z^- =$ anion]. Several compds. were prepared. For example, etherification of isopropylidenglycerol with 1-bromododecane using KOH in PhMe and acid hydrolysis with HCl in MeOH-Et₂O mixture gave 71% 3-dodecyloxy-1,2-propanediol. This underwent 1-O-tritylation with Ph_3CCl in pyridine, 2-O-alkylation by 1-bromodecane and NaH in THF (51%), and detritylation by p-MeC₆H₄SO₃H in CHCl₃-MeOH (63%) to give 3-dodecyloxy-2-decyloxy-1-propanol. The latter underwent esterification with $(PhO)_2P(O)Cl$ (60%), hydrogenolysis of the Ph ester to the phosphatidic acid, and reesterification with AZT using DCC (22%) to give title compound (Na salt) I. Another compound, (\pm)-3-octadecanamido-2-ethoxypropyl-1-phosphocholine, inhibited HBV virion DNA and intracellular RI HBV DNA in expts. to a comparable or greater extent than the standard agent ddC.
- IT 112989-01-2P 112989-02-3P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of phospholipids for combating hepatitis B virus)
- RN 112989-01-2 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



- RN 112989-02-3 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:694404 CAPLUS

DOCUMENT NUMBER: 123:160151

TITLE: Membrane-interactive phospholipids inhibit HIV type 1-induced cell fusion and surface gp160/ gp120 binding to monoclonal antibody

AUTHOR(S): Krugner-Higby, Lisa; Goff, David; Edwards, Terri; Iyer, Nathan; Neufeld, Jay; Kute, Timothy; Morris-Natschke, Susan; Ishaq, Khalid; Piantadosi, Claude; Kucera, Louis S.

CORPORATE SOURCE: Wake Forest University, Winsto-Salem, NC, 27157-1064, USA

SOURCE: AIDS Research and Human Retroviruses (1995), 11(6), 705-12

CODEN: ARHRE7; ISSN: 0889-2229

PUBLISHER: Liebert

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Membrane-interactive phospholipids (PLs), previously evaluated for activity against HIV-1 in vitro, are known to affect late steps in viral replication. Studies were done to determine the effects of PL analogs on post-translational processing of HIV-1 proteins, binding of viral surface gp160/gp120 to CD4 receptor, and HIV-1-induced cell fusion. Results of this investigation indicated that PL alone (1-octadecanamido-2-ethoxypropyl-rac-3-phosphocholine, CP-51) and PL-AZT conjugate (1-octadecanamido-2-ethoxypropyl-rac-3-phospho-3'-azido-3'-deoxythymidine, CP-92) have no effect on HIV-1-induced syntheses or processing of gp160/gp120, pr51, p24, or p17 (including myristoylation) in infected cells. Progeny HIV-1 particles made in CP-92-treated H9IIIB cells contained gp120, pr51, and p24; however, these virus particles had reduced capacity to bind to CD4+ cells. Both CP-51 and CP-92 inhibited syncytium (cell fusion) formation between treated HIV-1-infected cells and uninfected CD4+ cells, and, they reduced HIV-1 gp160/gp120 binding to CD4+ cells and monoclonal antibody. These results suggest that anti-HIV-1 activity of PL compds. involves alteration of cell surface membranes and viral envelopes. Phospholipid compds. are a novel class of membrane interactive compds. with potential use in blocking the spread of HIV-1 infection and pathogenesis in AIDS.

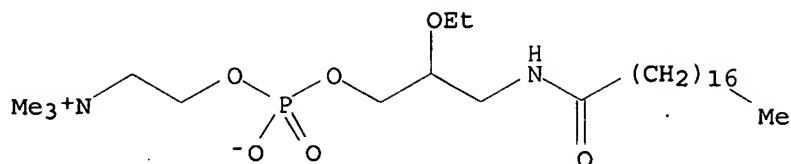
IT 112989-02-3, CP 51

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(membrane-interactive phospholipids inhibit HIV type 1-induced cell fusion and surface gp160/ gp120 binding to monoclonal antibody)

RN 112989-02-3 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:185901 CAPLUS

DOCUMENT NUMBER: 114:185901

TITLE: Synthesis and evaluation of novel ether lipid nucleoside conjugates for anti-HIV-1 activity

AUTHOR(S): Piantadosi, Claude; Marasco, Canio J., Jr.; Morris-Natschke, Susan L.; Meyer, Karen L.; Gumus, Fatma; Surles, Jefferson R.; Ishaq, Khalid S.; Kucera, Louis S.; Iyer, Nathan; et al.

CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA

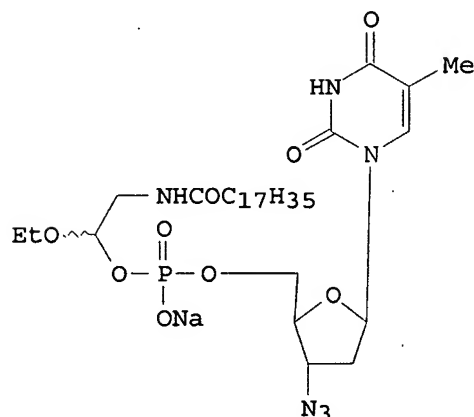
SOURCE: Journal of Medicinal Chemistry (1991), 34(4), 1408-14
CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 114:185901

GI



I

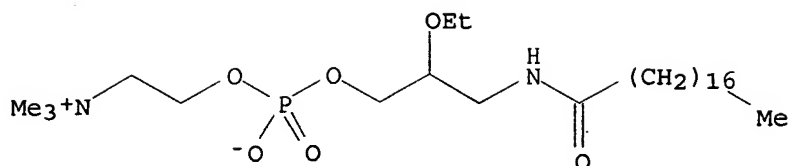
AB Combinations of an amidoalkylphosphocholine, C17H35CONHCH2CH(OEt)CH2OP(O)(O-)OCH2CH2N+Me3, and AZT were found to cause an apparent synergistic action in suppressing infectious HIV-1 replication. In addition, alkylamido, alkyloxy, and alkylthio ether lipids were chemical linked to anti-HIV-1 nucleosides (AZT and DDI) through phosphate and phosphonate linkages. These conjugates show promising in vitro anti-HIV-1 activity. Also, the conjugates have a 5-10-fold reduction in cell cytotoxicity compared to AZT alone. The most active compound, an alkylamido ether lipid-AZT conjugate, I was found to have a differential selectivity of 1793 in a syncytial plaque assay. In comparison, AZT alone has a value of 1281.

IT 112989-02-3

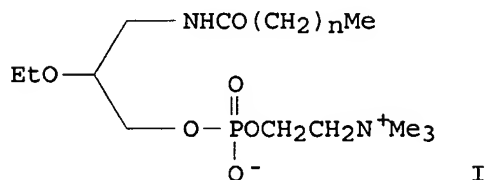
RL: RCT (Reactant); RACT (Reactant or reagent)
(anti-HIV-1 activity of)

RN 112989-02-3 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



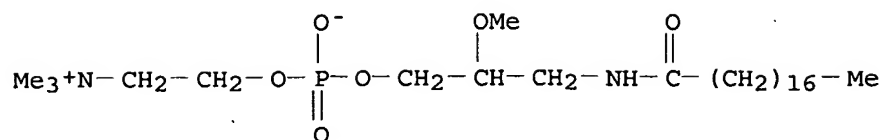
L4 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1991:185881 CAPLUS
 DOCUMENT NUMBER: 114:185881
 TITLE: In vitro evaluation of phosphocholine and quaternary ammonium containing lipids as novel anti-HIV agents
 AUTHOR(S): Meyer, Karen L.; Marasco, Canino J., Jr.; Morris-Natschke, Susan L.; Ishaq, Khalid S.; Piantadosi, Claude; Kucera, Louis S.
 CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA
 SOURCE: Journal of Medicinal Chemistry (1991), 34(4), 1377-83
 CODEN: JMCMAR; ISSN: 0022-2623
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 114:185881
 GI



AB A series of synthetic lipids containing a two- or three-carbon backbone substituted with a thio, oxy, or amidoalkyl functionality and either a phosphocholine or quaternary ammonium moiety were evaluated as potential anti-HIV-1 agents. Several analogs were identified as possessing activity with the most promising compound being rac-3-octadecanamido-2-ethoxypropylphosphocholine (I). I exhibited an IC50 for the inhibition of plaque formation of 0.16 μ M which was 84-fold lower than the IC50 value determined for CEM-SS cell growth inhibition. Initial mechanistic studies have indicated that these compds., unlike AZT, are not reverse transcriptase (RT) inhibitors, but instead appear to inhibit a late step in HIV replication involving virus assembly and infectious virus production. Since these lipids are acting via a different, mechanism they represent an alternative approach to the chemotherapeutic treatment of AIDS as well as candidates for combination therapy with AZT.

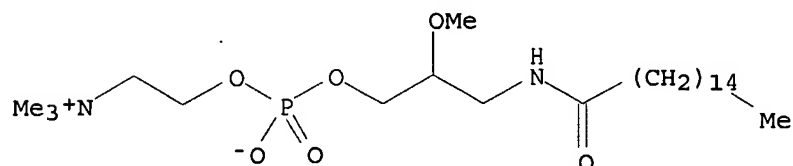
IT 88876-07-7 112989-00-1 112989-01-2
 112989-02-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (anti-HIV-1 activity of)

RN 88876-07-7 CAPLUS
 CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 4-hydroxy-7-methoxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (CA INDEX NAME)



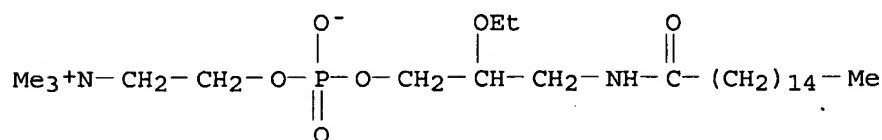
RN 112989-00-1 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium, 4-hydroxy-7-methoxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



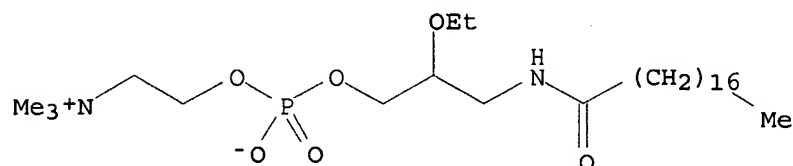
RN 112989-01-2 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 112989-02-3 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)

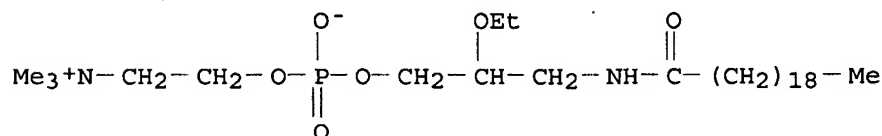


IT 149576-20-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and anti-HIV-1 activity of)

RN 149576-20-5 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphanonacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:470710 CAPLUS

DOCUMENT NUMBER: 113:70710

TITLE: Novel membrane-interactive ether lipid analogs that inhibit infectious HIV-1 production and induce defective virus formation

AUTHOR(S): Kucera, Louis S.; Iyer, Nathan; Leake, Eva; Raben, Adam; Modest, Edward J.; Daniel, Larry W.; Piantadosi, Claude

CORPORATE SOURCE: Bowman Gray Sch. Med., Wake Forest Univ., Winston-Salem, NC, 27103, USA

SOURCE: AIDS Research and Human Retroviruses (1990), 6(4), 491-501
CODEN: ARHRE7; ISSN: 0889-2229

DOCUMENT TYPE: Journal

LANGUAGE: English

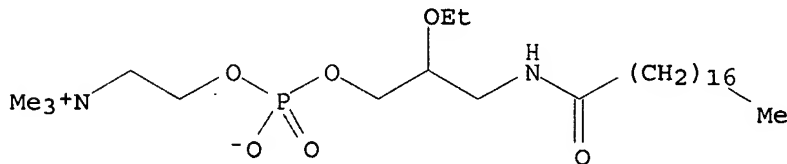
AB A new class of membrane-active ether lipid (EL) analogs of platelet-activating factor were studied for in vitro anti-HIV-1 activity. Human T-cell (CEM-ss) monolayers or suspension cultures were used to determine effects of structural modifications of Type A phosphorus-containing and Type B nonphosphorus EL analogs on (a) the inhibitory concn.50 (IC50) for HIV-1 syncytial plaque formation and cell growth, and, (b) virus budding at the cell plasma membrane. Results indicate that representative Type A and Type B EL inhibit HIV-1 but not herpes simplex virus type 2 plaque formation when added before or up to 2 days after viral infection. Anti-HIV-1 activity does not involve direct inactivation of virus infectivity. Type A EL (IC50 range = 0.2-1.4 µM) with alkoxy, alkylthio, or alkyamido substitution at glycerol position 1 and ethoxy or methoxy substitution at position 2, and Type B compds. (IC50 range = 0.33-0.63 µM) with an inverse choline or nitrogen heterocyclic substitution at position 3 have selective activity against HIV-1-infected T-cells. EL treatment of HIV-1-infected cells is associated with subsequent release of reverse transcriptase activity, but infectious virus production is inhibited with time after infection. Electron microscopic examination of HIV-1-infected and EL-treated cells revealed absence of detectable budding virus at the plasma membrane but presence of intracytoplasmic vacuolar virus particles. EL analogs are a novel class of agents that induce defective intracytoplasmic vacuolar HIV-1 formation in T-cells. Being membrane interactive, EL are ideally suited for combination chemotherapy with DNA-interactive anti-HIV nucleoside analogs.

IT 112989-02-3

RL: BIOL (Biological study)
(human immunodeficiency virus infection response to)

RN 112989-02-3 CAPLUS

CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 12 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2007:121606 USPATFULL

TITLE: Lipid analogs for inhibiting HIV-1 activity

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, UNITED STATES
Morris-Natschke, Susan L., Apex, NC, UNITED STATES
Ishaq, Khalid S., Chapel Hill, NC, UNITED STATES

PATENT ASSIGNEE(S): Wake Forest University (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2007105812 A1 20070510
 US 7294620 B2 20071113
 APPLICATION INFO.: US 2006-588311 A1 20061027 (11)
 RELATED APPLN. INFO.: Division of Ser. No. US 1999-412539, filed on 4 Oct 1999, GRANTED, Pat. No. US 7129227 Division of Ser. No. US 1997-793470, filed on 2 May 1997, GRANTED, Pat. No. US 5962437 Continuation of Ser. No. US 1994-314901, filed on 29 Sep 1994, ABANDONED Continuation-in-part of Ser. No. US 1994-297416, filed on 29 Aug 1994, ABANDONED
 DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004, US
 NUMBER OF CLAIMS: 18
 EXEMPLARY CLAIM: 1-106
 LINE COUNT: 898

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to methods of treating viral infections, and in particular hepatitis B virus. The method comprises administering to a subject in need of such treatment an infection-controlling amount of a phospholipid or phospholipid derivative to inhibit the activity of the viral infection.

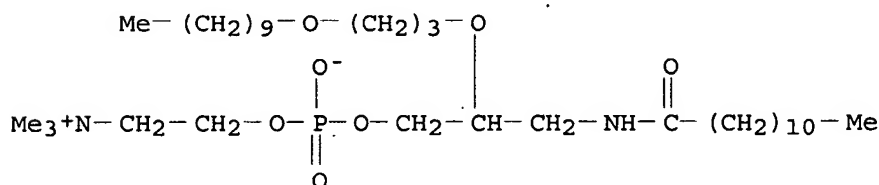
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 178172-98-0 178172-99-1 178173-00-7
 178173-01-8

(phospholipids for treating viral infections and tumors)

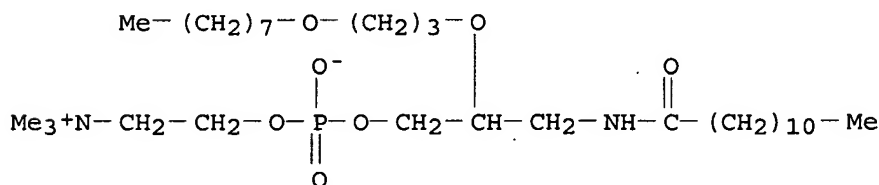
RN 178172-98-0 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(decyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



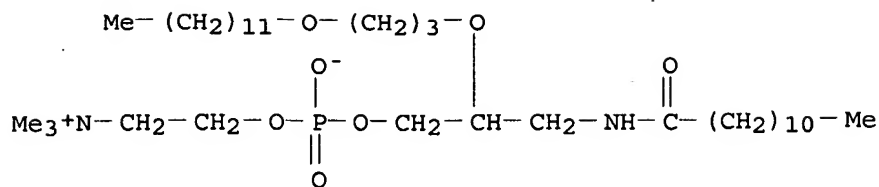
RN 178172-99-1 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[3-(octyloxy)propoxy]-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



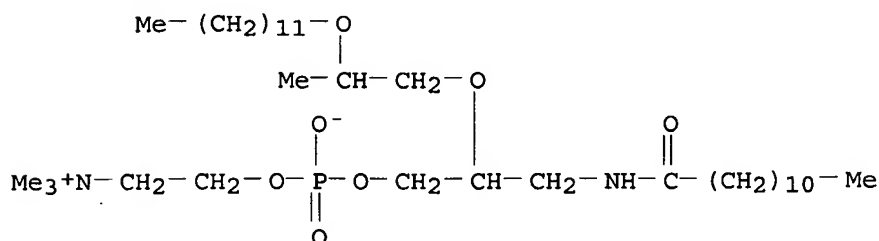
RN 178173-00-7 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 178173-01-8 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[2-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 13 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2007:121605 USPATFULL

TITLE: Lipid analogs for inhibiting the activity of hepatitis B antigen

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, UNITED STATES
Morris-Natschke, Susan L., Apex, NC, UNITED STATES
Ishaq, Khalid S., Chapel Hill, NC, UNITED STATES

PATENT ASSIGNEE(S): Wake Forest University (U.S. corporation)
University of North Carolina at Chapel Hill (U.S. corporation)

	NUMBER	KIND	DATE
	-----	----	-----
PATENT INFORMATION:	US 2007105811	A1	20070510
	US 7294619	B2	20071113
APPLICATION INFO.:	US 2006-588308	A1	20061027 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2004-889127, filed on 13 Jul 2004, GRANTED, Pat. No. US 7135584 Division of Ser. No. US 1999-412539, filed on 4 Oct 1999, GRANTED, Pat. No. US 7129227 Division of Ser. No. US 1997-793470, filed on 2 May 1997, GRANTED, Pat. No. US 5962437 Continuation of Ser. No. US 1994-314901, filed on 29 Sep 1994, ABANDONED Continuation-in-part of Ser. No. US 1994-297416, filed on 29 Aug 1994, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004, US		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1-106		
LINE COUNT:	899		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to methods of treating viral infections, and in particular hepatitis B virus. The method comprises administering to a subject in need of such treatment an infection-controlling amount of a phospholipid or phospholipid derivative to inhibit the activity of the viral infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

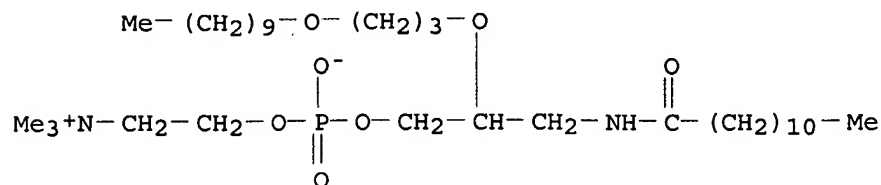
IT 178172-98-0 178172-99-1 178173-00-7

178173-01-8

(phospholipids for treating viral infections and tumors)

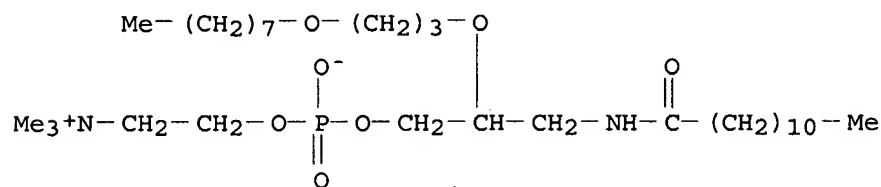
RN 178172-98-0 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(decyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



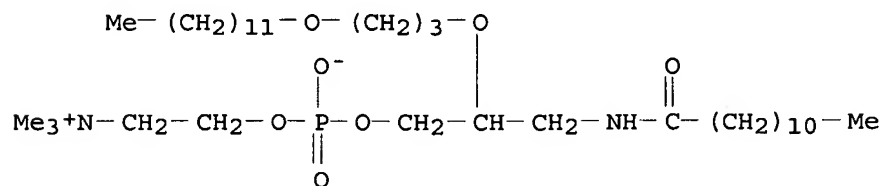
RN 178172-99-1 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[3-(octyloxy)propoxy]-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



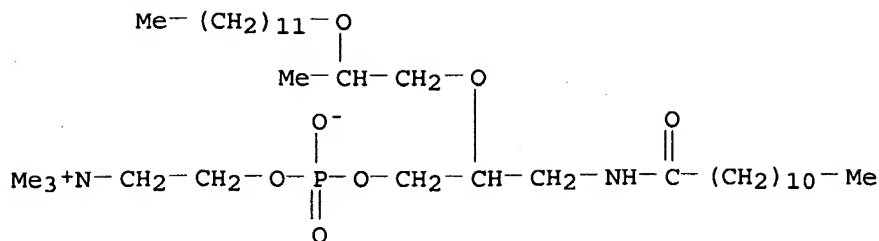
RN 178173-00-7 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 178173-01-8 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[2-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 14 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2007:114796 USPATFULL

TITLE: Lipid analogs for combating tumors

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, UNITED STATES
 Morris-Natschke, Susan L., Apex, NC, UNITED STATES
 Ishaq, Khalid S., Chapel Hill, NC, UNITED STATES

PATENT ASSIGNEE(S): Wake Forest University (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007099870	A1	20070503
	US 7294621	B2	20071113
APPLICATION INFO.:	US 2006-588313	A1	20061027 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2004-943923, filed on 20 Sep 2004, GRANTED, Pat. No. US 7141557 Continuation of Ser. No. US 1999-412539, filed on 4 Oct 1999, GRANTED, Pat. No. US 7129227 Division of Ser. No. US 1997-793470, filed on 2 May 1997, GRANTED, Pat. No. US 5962437 Continuation of Ser. No. US 1994-314901, filed on 29 Sep 1994, ABANDONED Continuation-in-part of Ser. No. US 1994-297416, filed on 29 Aug 1994, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004, US		
NUMBER OF CLAIMS:	19		
EXEMPLARY CLAIM:	1-106		
LINE COUNT:	900		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to methods of treating viral infections, and in particular hepatitis B virus. The method comprises administering to a subject in need of such treatment an infection-controlling amount of a phospholipid or phospholipid derivative to inhibit the activity of the viral infection.

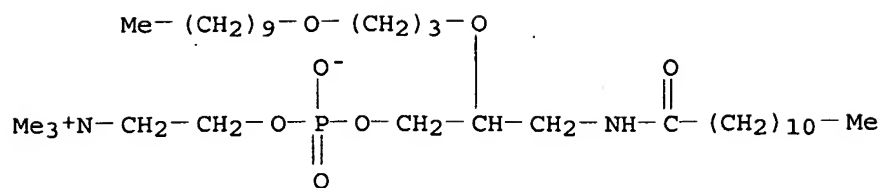
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 178172-98-0 178172-99-1 178173-00-7
 178173-01-8

(phospholipids for treating viral infections and tumors)

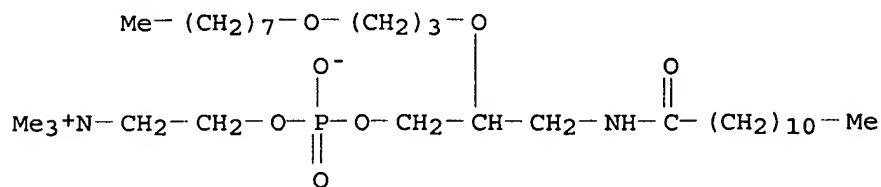
RN 178172-98-0 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(decyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



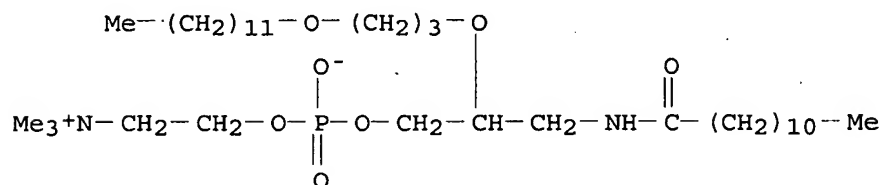
RN 178172-99-1 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[3-(octyloxy)propoxy]-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



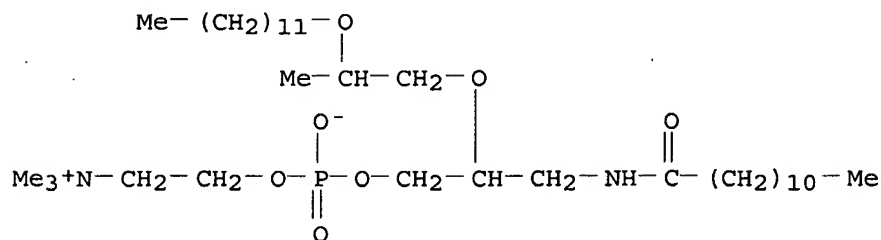
RN 178173-00-7 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 178173-01-8 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[2-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 15 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2006:284487 USPATFULL

TITLE: Lipid analogs for treating viral infections

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, UNITED STATES
Morris-Natschke, Susan L., Apex, NC, UNITED STATES
Ishaq, Khalid S., Chapel Hill, NC, UNITED STATES

PATENT ASSIGNEE(S): Wake Forest University, Winston Salem, NC, UNITED STATES

STATES (U.S. corporation)
University of North Carolina at Chapel Hill, Chapel
Hill, NC, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
	-----	-----	-----
PATENT INFORMATION:	US 7129227	B1	20061031
APPLICATION INFO.:	US 1999-412539		19991004 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 2003-793470, Pat. No. US 5962437 A 371 of International Ser. No. WO 1995-US10111, filed on 7 Aug 1995 Continuation of Ser. No. US 1994-314901, filed on 29 Sep 1994, ABANDONED Continuation-in-part of Ser. No. US 1994-297416, filed on 29 Aug 1994, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Coleman, Brenda		
LEGAL REPRESENTATIVE:	Morgan Lewis & Bockius LLP		
NUMBER OF CLAIMS:	24		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1259		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of treating viral infections, and in particular HIV-1, hepatitis B virus, and herpesviruses, is disclosed. The method comprises administering to a subject in need of such treatment an infection-combating amount of a phospholipid or phospholipid derivative.

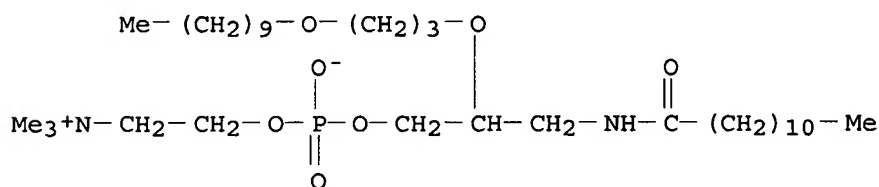
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 178172-98-0 178172-99-1 178173-00-7
178173-01-8

(phospholipids for treating viral infections and tumors)

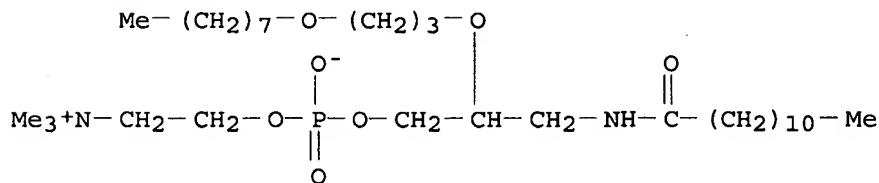
RN 178172-98-0 USPTFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(decyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



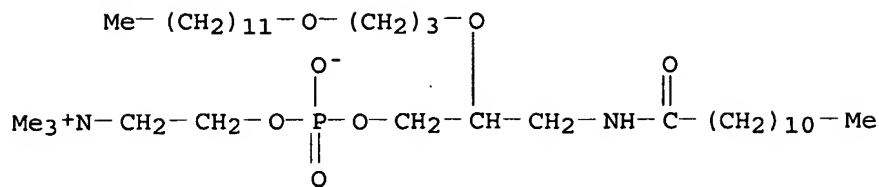
RN 178172-99-1 USPTFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[3-(octyloxy)propoxy]-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



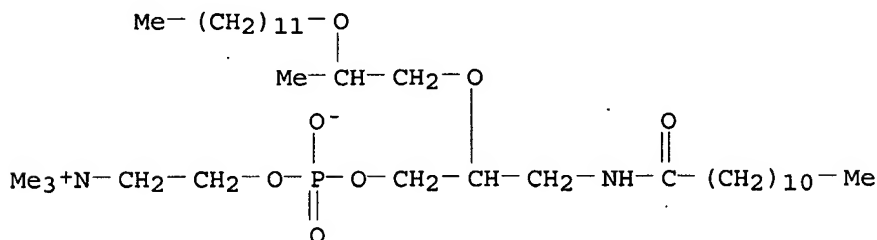
RN 178173-00-7 USPTFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 178173-01-8 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[2-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 16 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2005:215516 USPATFULL

TITLE: { Phospholipids for the treatment of infection by togaviruses, herpes viruses and coronaviruses

INVENTOR(S): Fleming, Ronald A., Cary, NC, UNITED STATES
Hes, Jan V., Hurdle Mills, NC, UNITED STATES
Huang, Yunsheng, Apex, NC, UNITED STATES
Read, Russ H., Rural Hall, NC, UNITED STATES
Morris-Natschke, Susan L., Apex, NC, UNITED STATES
Ishaq, Khalid S., Chapel Hill, NC, UNITED STATES
Kucera, Louis S., Pfaffown, NC, UNITED STATES
Furman, Phillip A., Durham, NC, UNITED STATES

PATENT ASSIGNEE(S): Kucera Pharmaceutical Company (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005187192	A1	20050825
APPLICATION INFO.:	US 2004-783927	A1	20040220 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Madeline I. Johnston, Esq., KING & SPALDING LLP, 45th Floor, 191 Peachtree Street, N.E., Atlanta, GA, 30303, US		
NUMBER OF CLAIMS:	65		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	2 Drawing Page(s)		
LINE COUNT:	2757		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided are compounds, methods and pharmaceutical compositions for treating a host, especially a human, infected with a togavirus, herpes virus and/or coronavirus, and in particular SARS-CoV, cytomegalovirus or varicella-zoster virus. The method in one embodiment comprises administering to that host an effective amount of an anti-togavirus, anti-herpes virus and/or anti-coronavirus phospholipid or a pharmaceutically acceptable salt or prodrug thereof. The phospholipid compound is, e.g., a 3-alkylamido-2-

alkoxypropylphosphocholine compound or salt thereof. The compound may be administered alone or in combination and/or alternation with one or more other anti-viral agents.

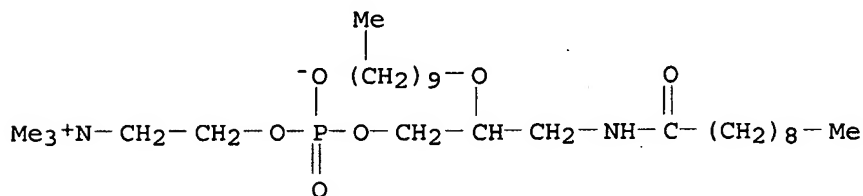
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 252371-27-0 443882-90-4 443882-91-5

(phospholipids for treatment of infection by togaviruses, herpes viruses and coronaviruses)

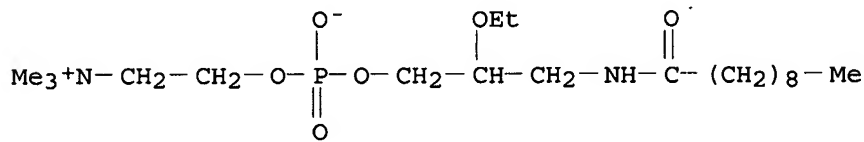
RN 252371-27-0 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphanadecan-1-aminium, 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



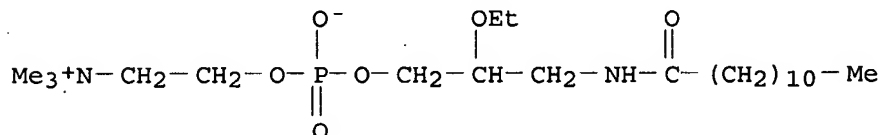
RN 443882-90-4 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphanadecan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-91-5 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 17 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2005:215515 USPATFULL

TITLE: Methods and compositions for the treatment of respiratory syncytial virus

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, UNITED STATES
Morris-Natschke, Susan L., Apex, NC, UNITED STATES
Ishaq, Khalid S., Chapel Hill, NC, UNITED STATES
Fleming, Ronald A., Cary, NC, UNITED STATES
Hess, Jan V., Hurdle Mills, NC, UNITED STATES
Huang, Yunsheng, Apex, NC, UNITED STATES
Read, Russ H., Rural Hall, NC, UNITED STATES
Furman, Phillip A., Durham, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005187191	A1	20050825
APPLICATION INFO.:	US 2004-781894	A1	20040220 (10)
DOCUMENT TYPE:	Utility		

FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE
 NW, WASHINGTON, DC, 20004, US
 NUMBER OF CLAIMS: 39
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 1 Drawing Page(s)
 LINE COUNT: 2105

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes compounds useful for inhibiting RSV replication and treating a host infected with RSV. The invention also includes methods of treating a host infected with RSV by administering to the host an anti-RSV effective amount of a compound of the invention.

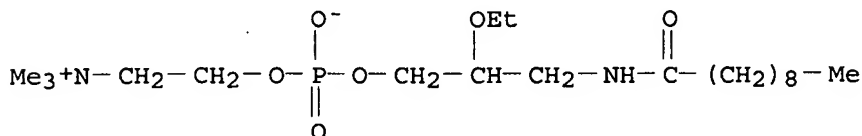
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 443882-90-4, KPC 11 443882-91-5, KPC 15

(compns. for treatment of respiratory syncytial virus)

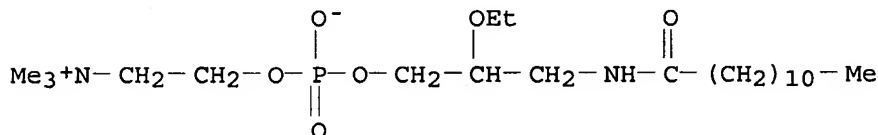
RN 443882-90-4 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-91-5 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



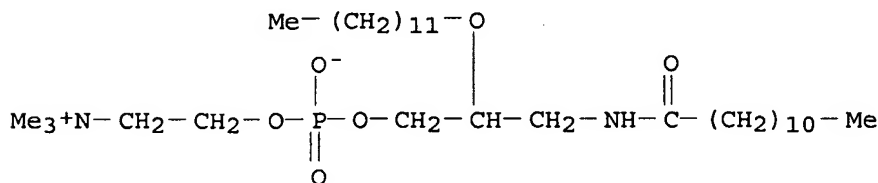
IT 207298-91-7 207298-93-9 252371-27-0

443882-96-0

(compns. for treatment of respiratory syncytial virus)

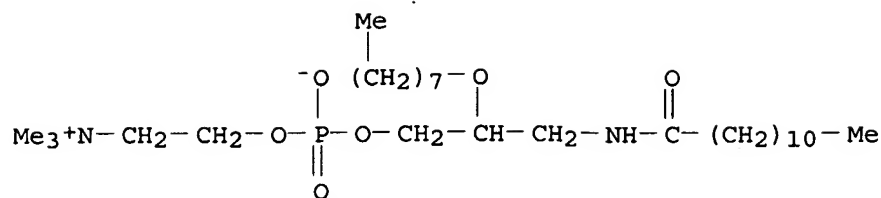
RN 207298-91-7 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-(dodecyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



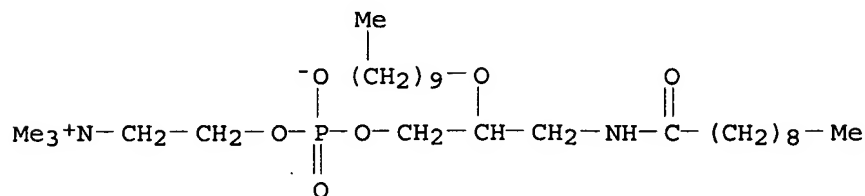
RN 207298-93-9 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-(octyloxy)-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



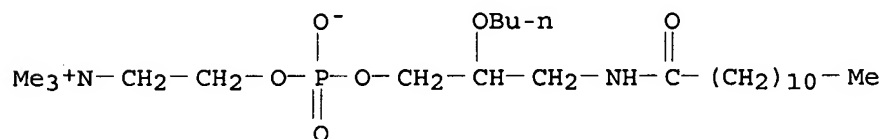
RN 252371-27-0 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphanonadecan-1-aminium, 7-(decyloxy)-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 443882-96-0 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-butoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 18 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2005:93372 USPATFULL

TITLE: Lipid analogs for treating viral infections

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, UNITED STATES

Morris-Natschke, Susan L., Apex, NC, UNITED STATES

Ishaq, Khalid S., Chapel Hill, NC, UNITED STATES

PATENT ASSIGNEE(S): Wake Forest University, Winston-Salem, NC, UNITED STATES (U.S. corporation)

University of North Carolina at Chapel Hill, Chapel Hill, NC, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005080050	A1	20050414
	US 7141557	B2	20061128
APPLICATION INFO.:	US 2004-943923	A1	20040920 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-412539, filed on 4 Oct 1999, PENDING Division of Ser. No. US 1997-793470, filed on 2 May 1997, GRANTED, Pat. No. US 5962437 A 371 of International Ser. No. WO 1995-US10111, filed on 7 Aug 1995		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004, US		
NUMBER OF CLAIMS:	34		
EXEMPLARY CLAIM:	1-106		
LINE COUNT:	960		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of treating viral infections, and in particular HIV-1, hepatitis B virus, and herpes virus, is disclosed.
The method comprises administering to a subject in need of such treatment an infection-controlling amount of a phospholipid or phospholipid derivative.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

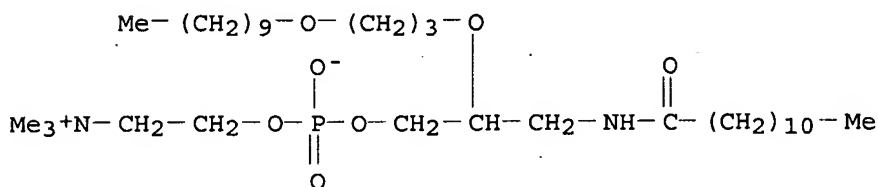
IT 178172-98-0 178172-99-1 178173-00-7

178173-01-8

(phospholipids for treating viral infections and tumors)

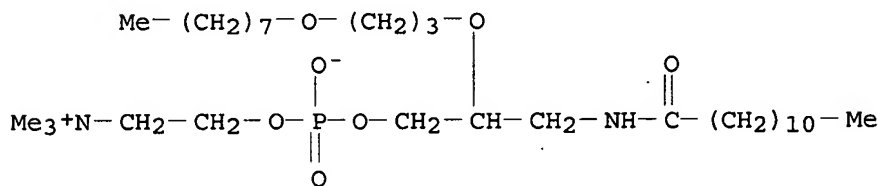
RN 178172-98-0 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(decyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



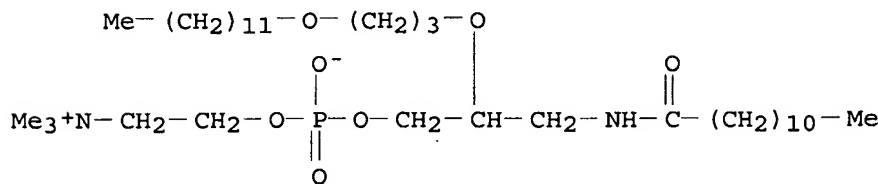
RN 178172-99-1 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[3-(octyloxy)propoxy]-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



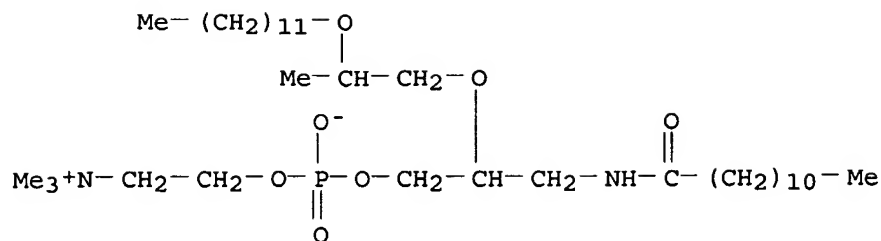
RN 178173-00-7 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 178173-01-8 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[2-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 19 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2004:328020 USPATFULL

TITLE: Lipid analogs for treating viral infections

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, UNITED STATES
Morris-Natschke, Susan L., Apex, NC, UNITED STATES
Ishaq, Khalid S., Chapel Hill, NC, UNITED STATES

PATENT ASSIGNEE(S): Wake Forest University, Winston-Salem, NC (U.S. corporation)
University of North Carolina at Chapel Hill, Chapel Hill, NC (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004259845	A1	20041223
	US 7135584	B2	20061114
APPLICATION INFO.:	US 2004-889127	A1	20040713 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-412539, filed on 4 Oct 1999, ABANDONED Division of Ser. No. US 1997-793470, filed on 2 May 1997, GRANTED, Pat. No. US 5962437 A 371 of International Ser. No. WO 1995-US10111, filed on 7 Aug 1995, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC, 20004		
NUMBER OF CLAIMS:	19		
EXEMPLARY CLAIM:	CLM-1-106		
LINE COUNT:	903		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of treating viral infections, and in particular HIV-1, hepatitis B virus, and herpes virus, is disclosed.
The method comprises administering to a subject in need of such treatment an infection-controlling amount of a phospholipid or phospholipid derivative.

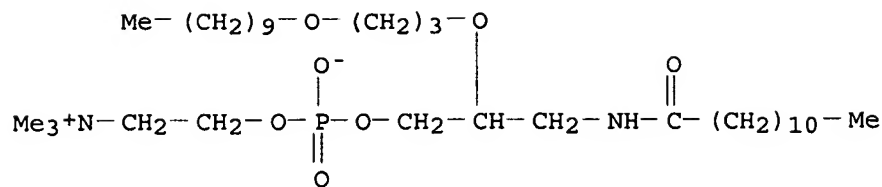
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 178172-98-0 178172-99-1 178173-00-7
178173-01-8

(phospholipids for treating viral infections and tumors)

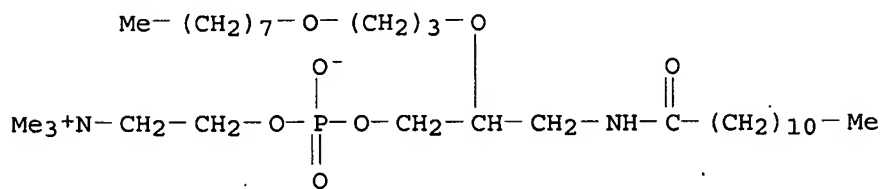
RN 178172-98-0 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(decyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI). (CA INDEX NAME)



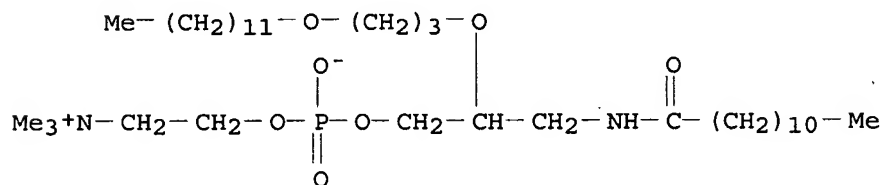
RN 178172-99-1 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-[3-(octyloxy)propoxy]-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



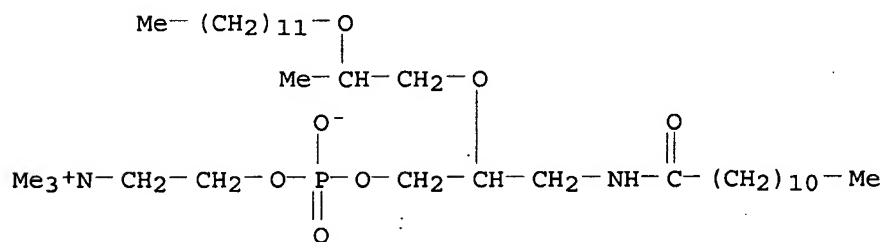
RN 178173-00-7 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 178173-01-8 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[2-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 20 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2000:24634 USPATFULL

TITLE: Method of treating hepatitis virus infections

INVENTOR(S): Morris-Natschke, Susan L., Apex, NC, United States
Kucera, Louis S., Pfafftown, NC, United States

PATENT ASSIGNEE(S): Wake Forest University, Winston-Salem, NC, United States (U.S. corporation)

University of North Carolina at Chapel Hill, Chapel Hill, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6030960		20000229
APPLICATION INFO.:	US 1998-102308		19980622 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1995-465947, filed on 6 Jun 1995, now patented, Pat. No. US 5770584 which is a continuation-in-part of Ser. No. US 1993-74943, filed on 10 Jun 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wilson, James O.		
LEGAL REPRESENTATIVE:	Akin, Gump, Strauss, Hauer & Feld, L.L.P.		
NUMBER OF CLAIMS:	44		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)		
LINE COUNT:	1631		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of treating hepatitis virus infection is disclosed.
The method comprising administering to a human subject in need of such treatment an effective hepatitis virus-combatting amount of an alkyl lipid or alkyl lipid derivative.

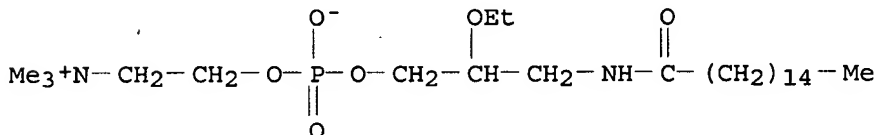
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 112989-01-2P 112989-02-3P

(preparation of phospholipids for combating hepatitis B virus)

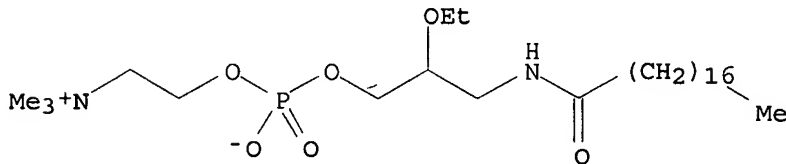
RN 112989-01-2 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 112989-02-3 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphahaptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 21 OF 22 USPATFULL on STN

ACCESSION NUMBER: 1999:121339 USPATFULL

TITLE: Lipid analogs for treating viral infections

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, United States
Morris-Natschke, Susan L., Apex, NC, United States
Ishaq, Khalid S., Chapel Hill, NC, United States

PATENT ASSIGNEE(S): Wake Forest University, Winston-Salem, NC, United States (U.S. corporation)

NUMBER	KIND	DATE
--------	------	------

PATENT INFORMATION: US 5962437 19991005
 WO 9606620 19960307
 APPLICATION INFO.: US 1997-793470 19970502 (8)
 WO 1995-US10111 19950807
 19970502 PCT 371 date
 19970502 PCT 102(e) date
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-314901, filed on 29
 Sep 1994, now abandoned which is a continuation-in-part
 of Ser. No. US 1994-297416, filed on 29 Aug 1994, now
 abandoned
 DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Raymond, Richard L.
 ASSISTANT EXAMINER: Coleman, Brenda
 LEGAL REPRESENTATIVE: Schwegman, Lundberg, Woessner & Kluth, P.A.
 NUMBER OF CLAIMS: 33
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1159

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of treating viral infections, and in particular HIV-1,
 hepatitis B virus and herpes viruses, is disclosed. The method
 comprising administering to a subject in need of such treatment an
 infection-combating amount of a phospholipid or phospholipid derivative.

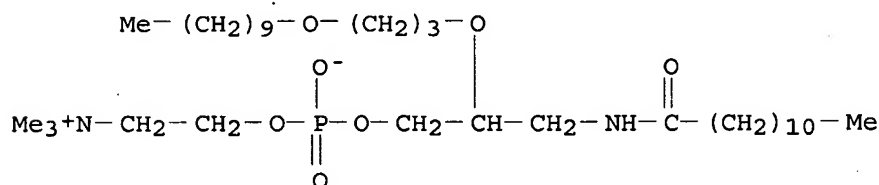
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 178172-98-0 178172-99-1 178173-00-7
 178173-01-8

(phospholipids for treating viral infections and tumors)

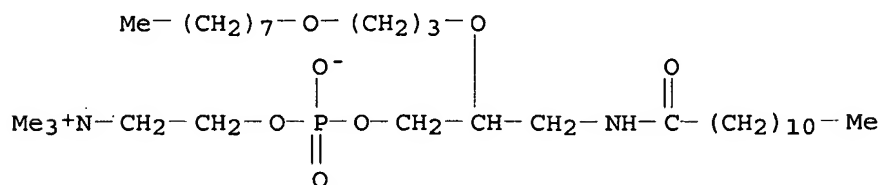
RN 178172-98-0 USPTFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(decyloxy)propoxy]-4-
 hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX
 NAME)



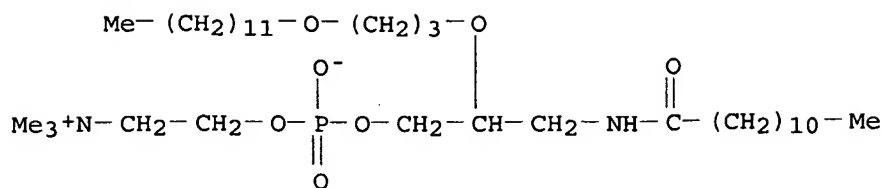
RN 178172-99-1 USPTFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-
 [3-(octyloxy)propoxy]-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX
 NAME)



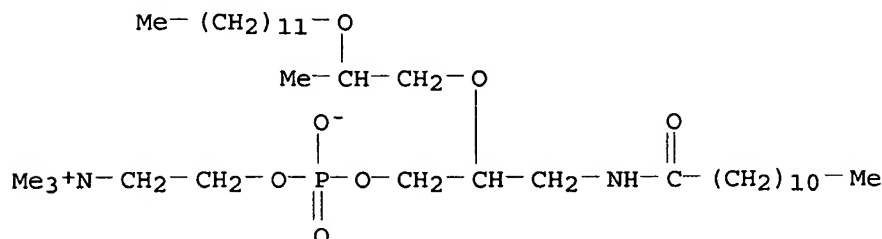
RN 178173-00-7 USPTFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[3-(dodecyloxy)propoxy]-4-
 hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX
 NAME)



RN 178173-01-8 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheneicosan-1-aminium, 7-[2-(dodecyloxy)propoxy]-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



L4 ANSWER 22 OF 22 USPATFULL on STN

ACCESSION NUMBER: 1998:72609 USPATFULL

TITLE: Method of treating hepatitis virus infections

INVENTOR(S): Kucera, Louis S., Pfafftown, NC, United States

Morris-Natschke, Susan L., Apex, NC, United States

PATENT ASSIGNEE(S): Wake Forest University, Winston-Salem, NC, United States (U.S. corporation)
University of North Carolina, Chapel Hill, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5770584		19980623
APPLICATION INFO.:	US 1995-465947		19950606 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-74943, filed on 10 Jun 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wilson, James O.		
LEGAL REPRESENTATIVE:	Schwegman, Lundberg, Woessner & Kluth, P.A.		
NUMBER OF CLAIMS:	14		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)		
LINE COUNT:	1527		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of treating hepatitis virus infection is disclosed.
The method comprising administering to a human subject in need of such treatment an effective hepatitis virus-combatting amount of an alkyl lipid or alkyl lipid derivative.

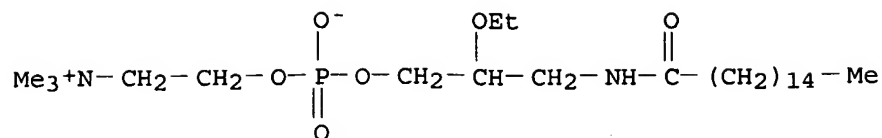
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 112989-01-2P 112989-02-3P 209532-02-5P
209532-03-6P

(alkyl lipids for treating hepatitis virus infections)

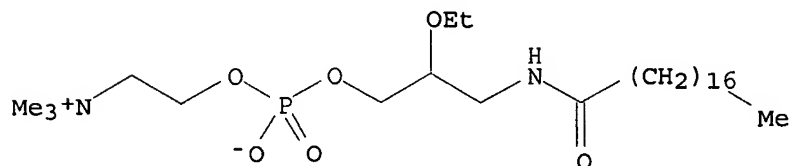
RN 112989-01-2 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 112989-02-3 USPATFULL

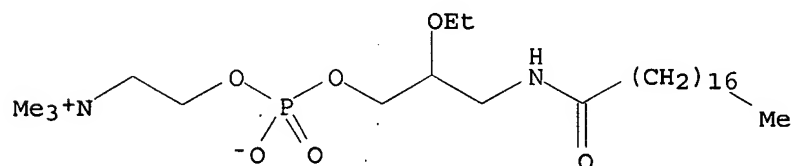
CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide (9CI) (CA INDEX NAME)



RN 209532-02-5 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphaheptacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide, (+) - (9CI) (CA INDEX NAME)

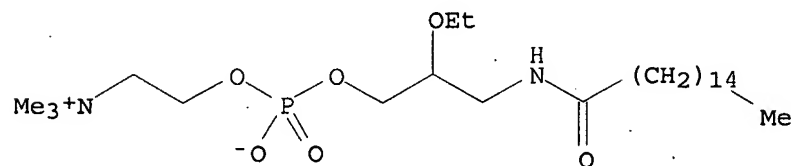
Rotation (+).



RN 209532-03-6 USPATFULL

CN 3,5-Dioxa-9-aza-4-phosphapentacosan-1-aminium, 7-ethoxy-4-hydroxy-N,N,N-trimethyl-10-oxo-, inner salt, 4-oxide, (+) - (9CI) (CA INDEX NAME)

Rotation (+).



=> d his

(FILE 'HOME' ENTERED AT 14:40:35 ON 09 JAN 2008)

FILE 'REGISTRY' ENTERED AT 14:40:51 ON 09 JAN 2008

L1 STRUCTURE UPLOADED

L2 70 S L1 FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:41:28 ON 09 JAN 2008

L3 48 S L2

L4 22 S L3 AND VIRUS

L5 2 S L4 AND RSV

=>

---Logging off of STN---

=>

Executing the logoff script...

=>.LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	152.42	330.99
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-8.80	-8.80

STN INTERNATIONAL LOGOFF AT 14:47:12 ON 09 JAN 2008